Am ndm nts to the Claims

- 1. (currently amended) A radio frequency band reject filter comprising a shunt acoustic resonator and a series acoustic resonator, the shunt resonator being arranged to resonate generally at the reject frequency band and the series resonator being arranged to anti-resonant anti-resonate generally at the reject frequency band, wherein the resonators are arranged such that there is substantially no acoustic resonance over a predetermined pass band.
- 2. (currently amended) A radio frequency filter according to claim 1, comprising a plurality of shunt acoustic resonators each arranged to resonate generally at the reject frequency band and a plurality of series acoustic resonators each arranged to anti-resonant anti-resonate generally at the reject frequency band, the shunt and series acoustic resonators being arranged in a ladder configuration.
- (original) A radio frequency band reject filter according to claim 1, wherein the shunt and series acoustic resonators are each formed as an array of a plurality of serially and parallel connected resonators.
- 4. (original) A radio frequency filter according to claim 2, wherein the acoustic resonators are one port devices.
- 5. (original) A radio frequency filter according to claim 2, wherein the acoustic resonators are surface acoustic wave resonators.
- 6. (original) A radio frequency filter according to claim 2, wherein the acoustic resonators are thin film bulk acoustic resonators.

- (original) A radio frequency filter according to claim 2, further including a high Q matching network arranged to reduce the apparent capacitance of the filter outside the reject frequency band.
- 8. (currently amended) A base station power amplifier for a cellular radio network, the power amplifier including at least one inter-stage band reject filter comprising a shunt acoustic resonator and a series acoustic resonator, the shunt resonator being arranged to resonate generally at the reject frequency band and the series resonator being arranged to anti-resonate generally at the reject frequency band, wherein the resonators are arranged such that there is substantially no acoustic resonance over a predetermined pass band.
- 9. (original) A power amplifier filter according to claim 8, wherein the acoustic resonators are one port devices.
- 10. (currently amended) A power amplifier <u>filter</u> according to claim 8, wherein the acoustic resonators are surface acoustic wave resonators.
- 11. (original) A power amplifier filter according to claim 8, wherein the acoustic resonators are thin film bulk acoustic resonators.
- 12. (currently amended) A duplexer for a mobile telephone handset including an radio frequency band reject filter comprising a shunt acoustic resonator and a series acoustic resonator, the shunt resonator being arranged to resonate generally at the reject frequency band and the series resonator being arranged to anti-resonant anti-resonate generally at the reject frequency band, wherein the resonators are arranged such that there is substantially no acoustic resonance over a predetermined pass band.

- 13. (original) A duplexer according to claim 12, wherein the acoustic resonators are one port devices.
- 14. (original) A duplexer according to claim 12, wherein the acoustic resonators are surface acoustic wave resonators.
- 15. (currently amended) A duplexer according to claim 12, wherein the acoustic resonators are thin film bulk acoustic resonators.
- 16. (currently amended) A low noise amplifier input stage including a band reject filter comprising a shunt acoustic resonator and a series acoustic resonator, the shunt resonator being arranged to resonate generally at the reject frequency band and the series resonator being arranged to anti-resonant anti-resonate generally at the reject frequency band, wherein the resonators are arranged such that there is substantially no acoustic resonance over a predetermined pass band.
- 17. (original) An input stage according to claim 16, wherein the acoustic resonators are one port devices.
- 18. (original) An input stage according to claim 16, wherein the acoustic resonators are surface acoustic wave resonators.
- 19. (original) An input stage according to claim 16, wherein the acoustic resonators are thin film bulk acoustic resonators.